

			Document number :
Sample Acknowledgment Letter			
<i>Specification For Approval</i>			
Customer name : Customer:	Jizhidá		
Supplier Name: me: Customer:	Shenzhen Guangyuanfa Electronics Co., Ltd. SHENZHEN GUANGYUANFA ELECTRONIC CO., LTD		
Customer Part Number:		Supplier Part Number:	GYF-2. 4G-V1. 0
Product description :	2.4GHz Wi-Fi Copper-Wire Antenna	Compatible models:	HKT7258
Supplier acknowledges (Seal):		Customer Acknowledgment (Seal):	
Produced by: Chen Weipeng	Author: Huang Wangchun		
Reviewed by: Chen Weiyuan	Date: July 11,2026		

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1. Specifications

1.1 Electrical Specifications

This report primarily provides test results for various electrical and structural performance parameters of the HKT7258 antenna.

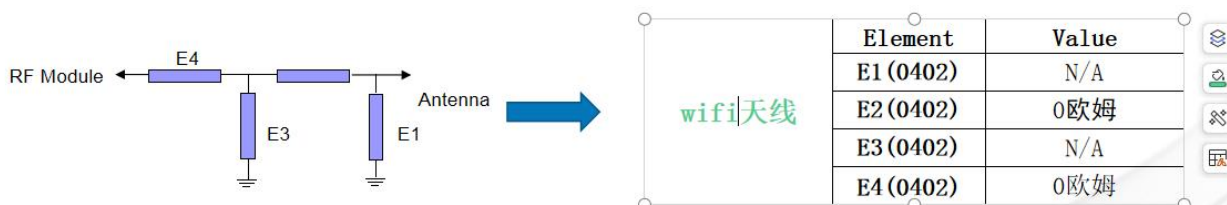
Specifications and models	Guangyuan Material Code
WIFI antenna	GYF-2. 4G-V1. 0

1.2 Antenna Frequency Range

The Table Below Lists the Electrical Performance Specifications for Antennas Designed and Mass-Produced by Guangyuanfa.

机型	HKT7258			
天线类型	FPC			
频段及天线材质	主天线	频段		材质
		2G	/	/
		3G	/	
		LTE	/	
	其他天线	分集	/	/
		WIFI\BT	2. 4G	铜管
性能要求	按客户要求执行			

2. Matching Circuit Diagram



天线匹配无改动

3. Structural Style

3.1 Antenna Components

The antenna primarily consists of copper tubing and coaxial cable.

4. Testing Facility

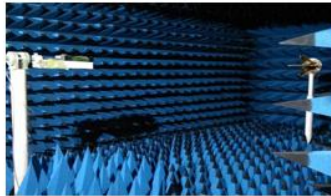
测试设备说明



24探头微波暗室



CWM500



7*4*3M ETS微波暗室



Agilent 8960



Agilent E5071B



高低温试验箱



MT8820C



HP8753ES

测试系统	测试环境	有源测试	无源测试
ETS 暗室 24探头OTA暗室	温度: $22^{\circ}\text{C} \pm 3^{\circ}\text{C}$ 湿度: $50\% \pm 15\%$	支持2G/3G/4G 支持NB-IoT/CAT-M/BT/WIFI	400MHz — 6G

5 VSWR Test Connection

5.1 Connection setup for VSWR testing: The sequential connection sequence for the VSWR testing equipment is as follows: IR & S ZVL Network Analyzer → Test Line → Test jig

6. Test

6.1 Test Site: Guangyuanfa Microwave Faraday Cage. The Test Frequency Range Is 400 MHz–6 GHz; the Quiet Zone Radius Is 50 Cm; and the Reflectivity Is [to Be Specified].

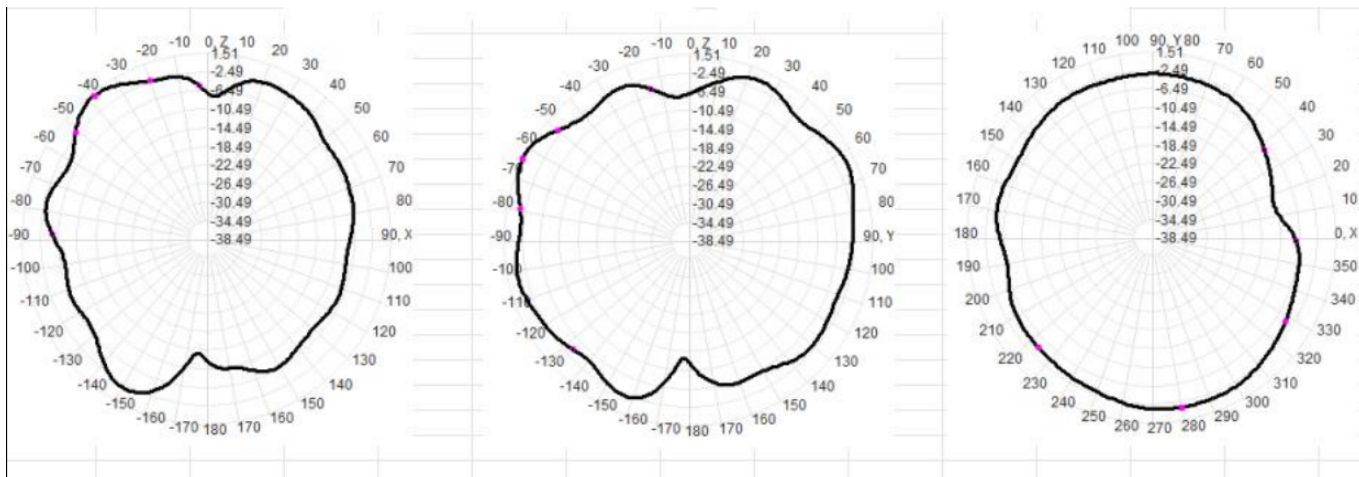
Less than -50 dB.

6.2 Test Instruments: Agilent 5071B, CMW500, Agilent 8960 E5515C, Standard Horn Antenna, 24-Point Probe OTA Microwave Dark Chamber Room testing system, printer, etc.

6.3 2.4G Antenna Passive Test: Standing Wave Ratio

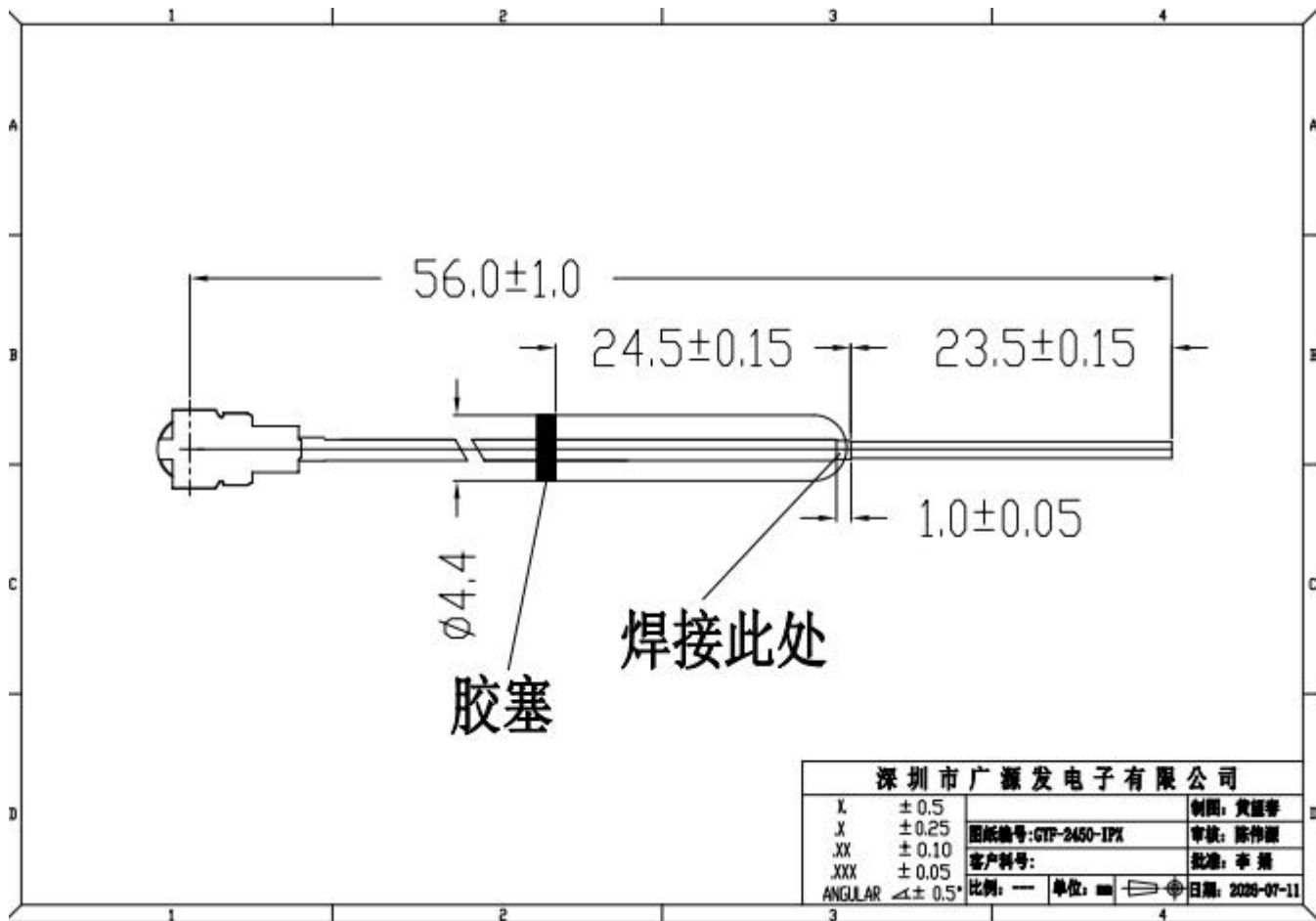


2500MHz



7. Drawing Specifications

7.1 Blueprint



7.2 Sample Dimension Measurement

Project Name	HKT7258	Finished Product Part Number	GYF-2. 4G-V1. 0	Date	2026. 6. 23			
Item	Specifications	Experimental Data					Judge	Remarks
		1	2	3	4	5		
1	56.1	56	56.02	56.08	56.04	56.06	OK	
2	24.5	24.5	24.5	24.5	24.5	24.5	OK	
3	4.4	4.4	4.4	4.4	4.4	4.4	OK	
4	1.13	1.13	1.13	1.13	1.13	1.13	OK	
5								

7.3 Bill Of Material

Bill Of Material

Project Name	HKT7258	Finished Product Part Number	GYF-2. 4G-V1. 0	Date	2026. 7. 11
Bill Of Material	Class	Material quality	Specifications	Dosage	
1	2.4G Copper Tube Antenna	Copper	56*24. 5*4. 4	1	
2	Coaxial cable	Copper	1.13 Black, 56mm, 1st Generation Terminal	1	
3					

8. Reliability Test

8.1 Reliability Test Report

Project Name	HKT7258	Finished Product Part Number	GYF-2. 4G-V1. 0	Date	2026. 7. 11
Test quantity	15pcs	Start time	June 14,09:15	Finish time	June 18,11:25 AM

Test item	Testing standard	Test Quantity	Test result	Remarks
Salt spray corrosion test	(1) Test temperature: Saltwater test: $35^{\circ}\text{C} \pm 2^{\circ}\text{C}$; Pressure vessel test: $47^{\circ}\text{C} \pm 1^{\circ}\text{C}$ (2) Experimental conditions/methods: Saltwater concentration $\geq 5\%$; solution pH: 6.5–7.2; air pressure: 1.0–1.2 kg/m ² ; the test duration shall be set according to the product specifications. (3) Test completion: After 2 hours, observe the product surface for signs of surface oxidation, discoloration, or peeling of the coating.	5pcs	OK	Testing time 48H
Low-temperature test	(1) Temperature: -30°C (-25°C – pilot-scale stage) (2) Test duration: 20 hours / Packaging conditions: Unpackaged (3) The test sample shall be placed in an extreme temperature chamber without being powered on; first, adjust the chamber temperature to 25°C and humidity to 65%, and maintain these conditions for 1 hour; then, cool the sample down to -30°C within 1 hour while maintaining the humidity at 65%; after maintaining the conditions for another 20 hours, raise the temperature back to ambient temperature over 1 hour; finally, perform the performance test after 2 hours. Appearance and Structure: The antenna's exterior surface shall be free of defects; the antenna shall not exhibit deformation, warping, or damage; its performance shall be normal; and its standing wave ratio shall not exceed 10% as specified in the product standards.	5pcs	OK	Testing time 20H
High-Temperature Test	(1) Temperature: $+70^{\circ}\text{C}$ ($+65^{\circ}\text{C}$ – pilot-scale stage); Humidity: 85% (80% – pilot-scale stage). (2) Test duration: 20 hours / Packaging conditions: Not packaged	5pcs	OK	

	Dress (3) The test sample shall be placed in an extreme temperature chamber without powering on; first, adjust the chamber temperature to 25 °C with a relative humidity of 65 %, and maintain these conditions for 1 hour; then, within 1 hour, raise the temperature to +70 °C and maintain it at this condition with a relative humidity of 85 % for 20 hours; next, cool the sample for 1 hour until it reaches ambient temperature; finally, perform the performance test after 2 hours. Appearance and Structure: The antenna's exterior surface shall be free of defects; the antenna shall not exhibit deformation, warping, or damage, and its performance shall be normal; the standing wave ratio shall not exceed 10% as specified in the product standard.			
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8.2 Product Storage Instructions

1. The exposed parts of the gold-plated components must undergo surface plating (anti-rust treatment), such as gold plating, OSP plating, or tin plating; the storage environment should be free from corrosive gases.
2. The antenna temperature must be maintained between 21–38 °C, and the humidity must be controlled between 50–70 %. Excessively high temperatures may cause the 3M adhesive to melt, resulting in degraded adhesion properties of the antenna.
3. It is recommended that if the initial bonding temperature is below 10°C, bonding is not suitable, as the adhesive will be too hard at this temperature to bond securely to the object; however, if bonding has already occurred, the adhesion strength at low temperatures remains satisfactory.
3. Under conditions of 21°C and 50% relative humidity, the shelf life is 24 months from the date of production when stored in the original packaging.

9. Working Temperature

Component	Temperature
Coaxial cable	-40~80°C
FPC Body	-50~280°C
3M adhesive (already applied to the machine)	-30-80°C

10. Physical Antenna Image

